

U.S. Serial No. 08/860,007

October 31, 2003

Page 2

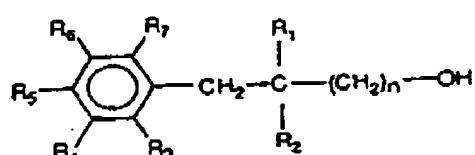
Claims 1-7 (canceled)

8. (previously presented) Composition according to claim 14 which contains

- (a) 0.01 to 10% by wt. of a compound of formula I, and
- (b) 0.1 to 90% by wt. of a compound selected from C₁-C₆ alkyl alcohols, unsubstituted or substituted with a C₆-C₁₂ aryl, aralkyl or aryloxy group, anionic cationic, amphoteric or nonionic surfactants, dimethylform-amide, betaines and glycerine.

Claims 9-12 (canceled)

13. (previously presented) A compound according to formula I,



wherein R₁, R₃, R₅, R₆, and R₇ are hydrogen; R₂ is an ethyl group; R₄ is chlorine; and n is 1 or 2.

U.S. Serial No. 08/860,007

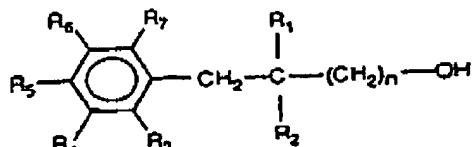
October 31, 2003

Page 3

14. (previously presented) A disinfectant, antiseptic, antimycotic, deodorant or preservative comprising:

a compound selected from alcohols, surfactants and solvents; and

at least one compound according to formula I:



wherein,

R₁ is hydrogen or is selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl;

R₂ is selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl; and

each of R₃ to R₇ independently, is hydrogen, halogen, nitrile or thiocyanate, or selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl, optionally attached to the aromatic ring by -S- or -O-, and n is 1 or 2,

with the proviso, that

i) when R₁ and all groups R₃ through R₇ are hydrogen, then

U.S. Serial No. 08/860,007
October 31, 2003
Page 4

$n = 2$;

- ii) when R_1 and R_2 are C_1 - C_6 alkyl and
 - a) all groups R_3 to R_7 are hydrogen, or
 - b) R_5 is methyl, methoxy or chloride, and all other groups R_3 , R_4 , R_6 and R_7 are hydrogen,
then $n = 2$;
- iii) when R_1 , R_2 and R_4 are methyl and all groups R_3 and R_5 through R_7 are hydrogen, then $n = 2$;
- iv) when R_1 and all groups R_3 , R_4 , R_6 and R_7 are hydrogen and R_5 is methyl, isopropyl, tert-butyl, or methoxy, then $n = 2$;
- v) when R_1 , R_3 , R_6 and R_7 are hydrogen, R_2 is methyl, and R_4 and/or R_5 are hydrogen or C_1 - C_6 alkyl, then $n = 2$;
- vi) when R_1 and R_4 through R_7 are hydrogen, R_2 is methyl or ethyl, and R_3 is methyl or methoxy, then $n = 2$;
- vii) when R_1 , R_3 , R_5 and R_7 are hydrogen, R_2 is methyl, R_4 and R_6 are methyl or R_4 is hydrogen and R_6 is methyl, then $n = 2$; and
- viii) when R_1 is hydrogen, R_2 is butyl, R_3 and R_5 are chloride, and all other groups R_4 , R_6 and R_7 are hydrogen, then $n = 2$.

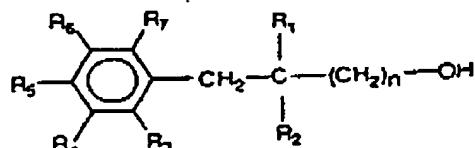
Claim 15 (canceled)

U.S. Serial No. 08/860,007

October 31, 2003

Page 5

16. (previously presented) A composition according to claim 14, wherein said compound according to formula I is present in an amount of about 0.01 to about 10% by weight.
17. (previously presented) A composition according to claim 14, wherein said compound according to formula I is present in an amount of about 0.05 to about 8% by weight.
18. (previously presented) A composition according to claim 14, wherein said compound according to formula I is present in an amount of about 0.1 to about 5% by weight.
19. (withdrawn) A compound according to the formula I



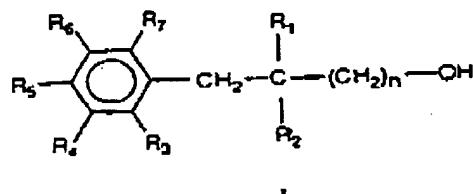
wherein R₃, R₄, R₅ and R₇ are all hydrogen, R₅ is methyl, R₂ is ethyl, R₁ is hydrogen, and n = 1.

U.S. Serial No. 08/860,007

October 31, 2003

Page 6

20. (withdrawn) Process for the production of a compound of formula I:



wherein, R₃, R₄, R₆ and R₇ are all hydrogen, R₅ is methyl, R₂ is

ethyl, R₁ is hydrogen, and n = 1

said process comprising the steps of:

- a) monoalkylating a malonic acid dialkyl ester to introduce the group R₂;
- b) dialkylating the monoalkylated malonic acid alkyl ester with a benzyl halide optionally substituted at the aromatic ring to introduce the groups R₃ through R₇ which are other than hydrogen;
- c) saponifying and decarboxylating the dialkylated malonic acid dialkyl ester to form a corresponding 3-aryl-substituted propionic acid, and
- d) reducing the 3-aryl-substituted propionic acid to form a desired alcohol of formula I.

21. (previously presented) A shampoo or shower gel containing a preservative comprising:

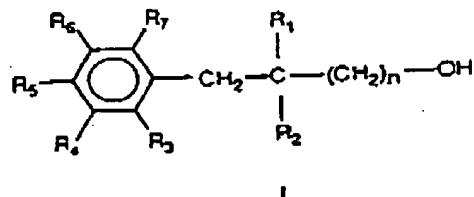
- a compound selected from alcohols, surfactants and solvents;
- a re-fattening agent; and

U.S. Serial No. 08/860,007

October 31, 2003

Page 7

a compound according to formula I:



wherein,

R₁ is hydrogen or is selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl;

R₂ is selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl; and

each of R₃ to R₇ independently, is hydrogen, halogen, nitrile or thiocyanate, or selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl, optionally attached to the aromatic ring by -S- or -O-, and n is 1 or 2, with the proviso that when R₁ and all groups R₃, R₄, R₆ and R₇ are hydrogen and R₅ is methyl, isopropyl, tert-butyl, or methoxy, then n = 2.

22. (previously presented) A method of disinfecting a surface comprising the step of applying a disinfectant to said surface, said disinfectant comprising:

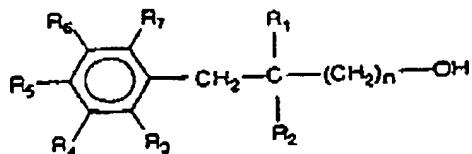
a compound selected from alcohols, surfactants and solvents; and

a compound according to formula I;

U.S. Serial No. 08/860,007

October 31, 2003

Page 8



wherein,

R₁ is hydrogen or is selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl;

R₂ is selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl; and

each of R₃ to R₇ independently, is hydrogen, halogen, nitrile or thiocyanate, or selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl, optionally attached to the aromatic ring by -S- or -O-, and n is 1 or 2, with the proviso that when R₁ and all groups R₃, R₄, R₆ and R₇ are hydrogen and R₅ is methyl, isopropyl, tert-butyl, or methoxy, then n = 2.

23. (previously presented) A method according to claim 22, wherein said surface is skin, a mucous membrane, or a surgical glove.

24. (previously presented) A method of deodorizing a surface comprising the step of applying a disinfectant to said surface, said deodorant comprising:

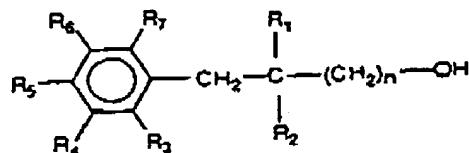
a compound selected from alcohols, surfactants and solvents; and

U.S. Serial No. 08/860,007

October 31, 2003

Page 9

a compound according to formula I:



wherein,

- R_1 is hydrogen or is selected from C_1 - C_8 alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C_2 - C_8 alkenyl and C_3 - C_8 alkynyl;
- R_2 is selected from C_1 - C_8 alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C_2 - C_8 alkenyl and C_3 - C_8 alkynyl; and
- each of R_3 to R_7 independently, is hydrogen, halogen, nitrile or thiocyanate, or selected from C_1 - C_8 alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C_2 - C_8 alkenyl and C_3 - C_8 alkynyl, optionally attached to the aromatic ring by -S- or -O-, and n is 1 or 2, with the proviso that when R_1 and all groups R_3 , R_4 , R_6 and R_7 are hydrogen and R_5 is methyl, isopropyl, tert-butyl, or methoxy, then n = 2.

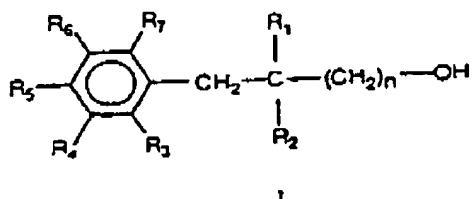
25. (previously presented) A method according to claim 24, wherein said surface is skin.

U.S. Serial No. 08/860,007

October 31, 2003

Page 10

26. (previously presented) Process for the production of a compound of formula I:



wherein,

R₁ is hydrogen;

R₂ is selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl; and

each of R₃ to R₇ independently, is hydrogen, halogen, nitrile or thiocyanate, or selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl, optionally attached to the aromatic ring by -S- or -O-, and n is 1;

said process comprising the steps of:

- a) monoalkylating a malonic acid dialkyl ester to introduce the group R₂;
- b) dialkylating the monoalkylated malonic acid alkyl ester with a benzyl halide optionally substituted at the aromatic ring to introduce the groups R₃ through R₇ which are other than hydrogen;
- c) saponifying and decarboxylating the dialkylated malonic acid dialkyl ester to form a corresponding 3-aryl-substituted propionic acid, and

U.S. Serial No. 08/860,007

October 31, 2003

Page 11

d) reducing the 3-aryl-substituted propionic acid to form a desired alcohol of formula I.

Claim 27 (canceled)

28. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₃ to R₇ are hydrogen, R₁ is hydrogen, R₂ is hydrogen and n is 1.

29. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₃ to R₇ are hydrogen, R₁ is hydrogen, R₂ is methyl, and n is 1.

30. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₃ and R₅ to R₇ are hydrogen, R₄ is methyl, R₁ is hydrogen, R₂ is methyl, and n is 1.

31. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₃ to R₇ are hydrogen, R₁ is hydrogen, R₂ is ethyl, and n is 1.

U.S. Serial No. 08/860,007

October 31, 2003

Page 12

32. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₃ and R₅ to R₇ are hydrogen, R₄ is methyl, R₁ is hydrogen, R₂ is ethyl, and n is 1.
33. (previously presented) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 14, wherein R₃ and R₅ to R₇ are hydrogen, R₄ is chlorine, R₁ is hydrogen, R₂ is ethyl and n is 1.
34. (previously presented) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 14, wherein R₄ to R₇ are hydrogen, R₃ is chlorine, R₁ is hydrogen, R₂ is ethyl and n is 1.
35. (previously presented) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 14, wherein R₃, R₄, R₆ and R₇ are hydrogen, R₅ is chlorine, R₁ is hydrogen, R₂ is ethyl and n is 1.
36. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein are hydrogen, R₄ and R₅ are chlorine, R₁ is hydrogen, R₂ is ethyl and n is 1.

U.S. Serial No. 08/860,007

October 31, 2003

Page 13

37. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₄ to R₇ are hydrogen, R₃ is methyl, R₁ is hydrogen, R₂ is ethyl and n is 1.
38. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₃, R₆ and R₇ are hydrogen, R₄ and R₅ are methyl, R₁ is hydrogen, R₂ is ethyl and n is 1.
39. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₃ and R₅ to R₇ are hydrogen, R₄ is methoxy, R₁ is hydrogen, R₂ is ethyl and n is 1.
40. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₃, R₆ and R₇ are hydrogen, R₄ and R₅ are methoxy, R₁ is hydrogen, R₂ is ethyl and n is 1.
41. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₃ to R₇ are hydrogen, R₁ is hydrogen, R₂ is butylene, and n is 1.

U.S. Serial No. 08/860,007

October 31, 2003

Page 14

42. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 27, wherein R₃ to R₇ are hydrogen, R₁ is hydrogen, R₂ is pentyl and n is 1.

43. (withdrawn) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 14, wherein R₁ is C₂H₅, R₂ through R₇ are H, and n is 1.

44. (withdrawn) A shampoo or shower gel containing a preservative according to claim 21, wherein R₁ is C₂H₅, R₂ through R₇ are H, and n is 1.

45. (withdrawn) A method according to claim 22, wherein R₁ is C₂H₅, R₂ through R₇ are H, and n is 1.

46. (withdrawn) A method according to claim 24, wherein R₁ is C₂H₅, R₂ through R₇ are H, and n is 1.

47. (withdrawn) A method according to claim 26, wherein R₁ is C₂H₅, R₂ through R₇ are H, and n is 1.

48. (new) A disinfectant, antiseptic, antimycotic, deodorant or preservative according to claim 14, wherein

R₁ is selected from C₁-C₈ alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C₂-C₈ alkenyl and C₃-C₈ alkynyl;

U.S. Serial No. 08/860,007

October 31, 2003

Page 15

R_2 is selected from C_1 - C_8 alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C_2 - C_8 alkenyl and C_3 - C_8 alkynyl; and each of R_3 to R_7 independently, is hydrogen, halogen, nitrile or thiocyanate, or selected from C_1 - C_8 alkyl, uninterrupted or interrupted by oxygen and/or sulphur atoms, C_2 - C_8 alkenyl and C_3 - C_8 alkynyl, optionally attached to the aromatic ring by -S- or -O-, and n is 1 or 2,

with the proviso, that

i) when R_1 and all groups R_3 through R_7 are hydrogen, then

$n = 2$;

ii) when R_1 and R_2 are C_1 - C_6 alkyl and

a) all groups R_3 to R_7 are hydrogen, or

b) R_5 is methyl, methoxy or chloride, and all other groups R_3 ,

R_4 , R_6 and R_7 are hydrogen,

then $n = 2$;

iii) when R_1 , R_2 and R_4 are methyl and all groups R_3 and R_5 through R_7 are hydrogen, then $n = 2$;

iv) when R_1 and all groups R_3 , R_4 , R_6 and R_7 are hydrogen and R_5 is methyl, isopropyl, tert-butyl, or methoxy, then $n = 2$;

v) when R_1 , R_3 , R_6 and R_7 are hydrogen, R_2 is methyl, and R_4 and/or R_5 are hydrogen or C_1 - C_6 alkyl, then $n = 2$;

vi) when R_1 and R_4 through R_7 are hydrogen, R_2 is methyl or ethyl, and R_3 is methyl or methoxy, then $n = 2$;

U.S. Serial No. 08/860,007

October 31, 2003

Page 16

- vii) when R_1 , R_3 , R_5 and R_7 are hydrogen, R_2 is methyl, R_4 and R_6 are methyl or R_4 is hydrogen and R_6 is methyl, then $n = 2$; and
- viii) when R_1 is hydrogen, R_2 is butyl, R_3 and R_5 are chloride, and all other groups R_4 , R_6 and R_7 are hydrogen, then $n = 2$.

49. (New) A composition according to claim 21, comprising 5 to 25% by weight of surfactants.